

What is claimed:

1. A metered dosage delivery system comprising a stable liquid oral dosage pharmaceutical composition, wherein the composition comprises at least one thyroid hormone; from about 40% to about 96% of ethanol by volume; a pH adjusting agent so that the measured pH of the composition is from about 9 to about 12, and from about 4% to about 50% water by volume.
2. The metered dosage delivery system of claim 1, wherein the thyroid hormone is selected from the group consisting of:
  - L-3, 5, 3', 5'-tetraiodothyronine (levothyroxine or LT4);
  - L-3, 5, 3' -triiodothyronine (liothyronine or LT3);
  - L-3, 3', 5' -triiodothyronine (LrT3);
  - L-3, 5-diiodothyronine (LT2);
  - pharmaceutically acceptable salts thereof; and mixtures thereof.
3. The metered dosage delivery system of claim 1, wherein the ethanol is present in an amount from about 50% to about 80% by volume of the composition.
4. The metered dosage delivery system of claim 1, further comprising from a trace amount to about 5% by mass of the composition of a pharmaceutically acceptable sequestering agent.
5. The metered dosage delivery system of claim 1, further comprising from a trace amount to about 5% by mass of the composition of a pharmaceutically acceptable anti-oxidant.
6. A method for preparing a metered dosage delivery system comprising filling the delivery system with a stable liquid oral dosage pharmaceutical composition, wherein the

composition comprises at least one thyroid hormone; from about 40% to about 96% of ethanol by volume; a pH adjusting agent so that the measured pH of the composition is from about 9 to about 12; and from about 4% to about 50% water by volume; whereby a metered dosage delivery system is prepared.

7. The metered dosage delivery system of claim 2, wherein the thyroid hormone is L-3, 5, 3', 5'-tetraiodothyronine (levothyroxine or LT4), or a pharmaceutically acceptable salt thereof.

8. The metered dosage delivery system of claim 2, wherein the thyroid hormone is L-3, 5, 3' -triiodothyronine (liothyronine or LT3), or a pharmaceutically acceptable salt thereof.

9. The metered dosage delivery system of claim 2, wherein the thyroid hormone is L-3, 3', 5' -triiodothyronine (LrT3); or a pharmaceutically acceptable salt thereof.

10. The metered dosage delivery system of claim 2, wherein the thyroid hormone is L-3, 5-diiodothyronine (LT2), or a pharmaceutically acceptable salt thereof.

11. The metered dosage delivery system of claim 1, wherein the fraction of thyroid hormone remaining after storage at 25°C in air for 6 months is at least 0.90.

12. The metered dosage delivery system of claim 1, wherein the fraction of thyroid hormone remaining after storage at 25°C under nitrogen for 6 months is at least 0.95.

13. The method of claim 7, wherein the thyroid hormone is selected from the group consisting of:

L-3, 5, 3', 5'-tetraiodothyronine (levothyroxine or LT4)

L-3, 5, 3' -triiodothyronine (liothyronine or LT3);

L-3, 3', 5' -triiodothyronine (LrT3);

L-3, 5-diiodothyronine (LT2);

pharmaceutically acceptable salts thereof; and mixtures thereof.

14. The method of claim 7, wherein the thyroid hormone is L-3, 5, 3', 5'-tetraiodothyronine (levothyroxine or LT4), or a pharmaceutically acceptable salt thereof.
15. The method of claim 7, wherein the thyroid hormone is L-3, 5, 3' – triiodothyronine (liothyronine or LT3), or a pharmaceutically acceptable salt thereof.
16. The method of claim 7, wherein the thyroid hormone is L-3, 3', 5' – triiodothyronine (LT3); or a pharmaceutically acceptable salt thereof.
17. The metered dosage delivery system of claim 7, wherein the thyroid hormone is L-3, 5-diiodothyronine (LT2), or a pharmaceutically acceptable salt thereof.
18. The method of claim 7, wherein the ethanol is present in an amount from about 50% to about 80% by volume of the composition.
19. The method of claim 7, wherein the composition is from a trace amount to about 5% by mass of the composition of a pharmaceutically acceptable sequestering agent.
20. The method of claim 7, wherein the composition further comprises from a trace amount to about 5% by mass of the composition of a pharmaceutically acceptable anti-oxidant.
21. The method of claim 7, wherein the fraction of thyroid hormone remaining after storage at 25°C in air for 6 months is at least 0.90.
22. The method of claim 7, wherein the fraction of thyroid hormone remaining after storage at 25°C under nitrogen for 6 months is at least 0.95.